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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,398	09/19/2003	Douglas S. Ransom	6270/126	9324
46260 7590 07/13/2007 BRINKS HOFER GILSON & LIONE/PML PO BOX 10395 CHICAGO, IL 60610			EXAMINER VON BUHR, MARIA N	
			ART UNIT 2125	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/666,398	<b>Applicant(s)</b> RANSOM ET AL.	
	<b>Examiner</b> M.N. Von Buhr	<b>Art Unit</b> 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 Sept 2003, 20 Jan 2004 & 14 Apr 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 92-124 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 92-124 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>see Office action</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The instant application is a continuation of U.S. Application Serial No. 10/340,374 and is, therefore, accorded the benefit of the earlier filing date of 09 January 2003.

Also, such parent application is a continuation-in-part of U.S. Application Serial No. 09/896,570, which is a continuation-in-part of U.S. Application Serial No. 09/814,436, which is a continuation-in-part of U.S. Application Serial No. 09/723,564, which is a continuation-in-part of U.S. Application Serial No. 10/068,431 (which is a continuation of U.S. Application Serial No. 08/798,723). Accordingly, the instant application is accorded the benefit of the earlier filing dates of 29 June 2001, 22 March 2001, 28 November 2000 and 12 February 1997, respectively, but only for that subject matter originally presented in each of the respective parent applications.

2. Examiner acknowledges receipt of Applicant's preliminary amendments, received 20 January 2004 and 14 April 2005; which amend the specification, cancel claims 1-91 and introduce claims 92-124. Claims 92-124 are now pending in this application.

3. Examiner acknowledges receipt of Applicant's information disclosure statements, received 19 September 2003, 29 December 2003, 23 January 2004, 24 May 2004, 17 September 2004 and 23 October 2006, with accompanying reference copies. These submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, they have been taken into consideration for this Office action.

4. The specification is objected to, because various applications are cited (pages 1 and 7 of the instant specification), without the status of their prosecution having been updated. Updating the status of these cited applications is required in response to this Office action.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "cellular modem" (claims 92, 101, 110 and 120), "Ethernet interface" (claims 94, 103, 112 and 120), "wired modem" (claims 94, 103, 112 and 120), "Bluetooth" (claims 94, 103, 112 and 120), "AC power line data network interface" (claims 94, 103, 112 and 120) and "wireless connection" (claim 118) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by Examiner, Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The non-statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute), so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A non-statutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 92-94, 96 and 100 are rejected on the ground of non-statutory double patenting over claims 1, 27, 43, 57, 59-61, 75, 80 and 82 of U.S. Patent No. 6,961,641 since the claims, if allowed, would improperly extend the “right to exclude” already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claims 1, 27,

43, 57, 59-61, 75, 80 and 82 of U.S. Patent No. 6,961,641 contain every element of claims 92-94, 96 and 100 of the instant application and as such anticipate claims 92-94, 96 and 100 of the instant application.

Furthermore, there is no apparent reason why Applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

9. Claims 118 and 119 are rejected on the ground of non-statutory double patenting over claims 1, 2 and 6 of U.S. Patent No. 6,990,395 since the claims, if allowed, would improperly extend the “right to exclude” already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claims 1, 2 and 6 of U.S. Patent No. 6,990,395 contain every element of claims 118 and 119 of the instant application and as such anticipate claims 118 and 119 of the instant application.

Furthermore, there is no apparent reason why Applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

10. Claims 118, 120 and 124 are provisionally rejected on the ground of non-statutory double patenting over claims 1, 4, 10, 12 and 15 of co-pending U.S. Application Serial No. 11/049,042 since the claims, if allowed, would improperly extend the “right to exclude” already granted in the patent. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced co-pending application and would be covered by any patent granted on that co-pending application since the referenced co-pending application and the instant application are claiming common subject matter, as follows: Claims 1, 4, 10, 12 and 15 of U.S. Application Serial No. 11/049,042 contain every element of claims 118, 120 and 124 of the instant application and as such anticipate claims 118, 120 and 124 of the instant application.

Furthermore, there is no apparent reason why Applicant would be prevented from presenting claims corresponding to those of the instant application in the other co-pending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

11. Claims 118 and 122 are provisionally rejected on the ground of non-statutory double patenting over claims 14-17 of co-pending U.S. Application Serial No. 11/497,218 since the claims, if allowed, would

improperly extend the “right to exclude” already granted in the patent. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced co-pending application and would be covered by any patent granted on that co-pending application since the referenced co-pending application and the instant application are claiming common subject matter, as follows: Claims 14-17 of U.S. Application Serial No. 11/497,218 contain every element of claims 118 and 122 of the instant application and as such anticipate claims 118 and 122 of the instant application.

Furthermore, there is no apparent reason why Applicant would be prevented from presenting claims corresponding to those of the instant application in the other co-pending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

**12.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by Applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by Applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by Applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**13.** Claims 118-120 are rejected under 35 U.S.C. §102(e), as being clearly anticipated by Noh (U.S. Patent No. 6,711,512; newly cited), which discloses a “load monitoring system using a wireless Internet network. The load monitoring system is capable of measuring, in real time, a variety of load parameters (phase voltages, phase currents and temperatures) ... on a distribution line. The results of the measurements are transferred to an operator in a branch operating station over the wireless Internet network so as to prevent losses resulting from overloaded and unbalanced states, thereby enhancing the quality of power supply and efficiently managing a distribution load” (abstract).

As per the claims, Noh teaches an electrical “load monitoring system using a wireless Internet network, comprising phase current detection means ...; phase voltage detection means ...; internal temperature detection means ...; external temperature detection means ...; an analog/digital converter ...; a microprocessor for performing an arithmetic operation for digital phase current, phase voltage, internal

temperature and external temperature data from the analog/digital converter and controlling the entire operation of the system; ...; a modem for receiving an output signal from the microprocessor, transmitting the received signal to a central control station via a base station and Internet network, receiving a control signal transmitted from the central control station and transferring the received control signal to the microprocessor” (col. 2, line 36 - col. 3, line 5). See also, at least, Fig. 5; col. 1, lines 5-19 and 41-59; col. 3, line 47 - col. 4, line 35; col. 6, lines 1-23; col. 8, lines 12-41; col. 8, line 52 - col. 9, line 36).

**14.** The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**15.** Claims 92-117 and 121-124 are rejected under 35 U.S.C. §103(a), as being unpatentable over Noh (U.S. Patent No. 6,711,512), similarly as presented above with regard to claims 118-120, further in view of Applicant’s admitted prior art, at pages 8, 9, 14, 15 and 17 of the instant specification.

As per claims 92-94, 101-103 and 110-112, although Noh teaches Applicant’s invention, substantially as instantly claimed, Noh does not specifically provide for a “cellular modem.” In this regard, it is extremely well-known in the wireless communication arts, to use cellular modems to provide wireless transmission capability. This is acknowledged by Applicant, at page 8 of the instant specification, where Applicant asserts that “cellular based modems and cellular system access are widely available.” It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to use such well-known cellular modems, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Further as per claims 96-99, 105-108, 114-117, 122 and 123, Applicant further acknowledges, at page 15 of the instant specification, the well-known feature that “cellular modems further provide the functionality to determine the geographic location of the IED using cellular RF triangulation.” Accordingly, any selection of cellular modems, in order to implement the wireless communication taught by Noh, would then necessarily provide such an intrinsic, known capability of determining a geographic location using RF triangulation.

Further as per claims 95, 100, 104, 109, 113, 121 and 124, Applicant acknowledges, at page 17 of the instant specification, that SLIP, PPP and TCP/IP are well-known Internet transport protocols.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. §103(a), Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for Examiner to consider the applicability of 35 U.S.C. §103(c) and potential 35 U.S.C. §102(e), (f) or (g) prior art under 35 U.S.C. §103(a).

17. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Applicant is advised to carefully review the cited art, as evidence of the state of the art, in preparation for responding to this Office action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M.N. Von Buhr whose telephone number is 571-272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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